

Claims

1. An electric motor having a wound rotor and a stator,
the rotor having a rotor core mounted on a shaft, a commutator mounted on
5 the shaft adjacent one end of the rotor core and rotor windings wound around the rotor
core and connected to terminals of the commutator, and a fan for generating a flow of
cooling air,
wherein the commutator has a base and a plurality of commutator segments
fixed to the base, each segment having a brush contact portion and a terminal and the
10 base having a support portion supporting the brush contact portion of the segments
and a terminal portion supporting the terminals and wherein the fan has an integral
inner collar from which a plurality of fan blades extend, the collar being fitted to the
terminal portion.
- 15 2. The motor of claim 1, wherein the collar is fixed to the terminal portion by
complementary formations including snap-fit detents.
3. The motor of claim 2, wherein the complementary formations further include
blade like projections extending radially from the terminal portion which engage slots
20 in the collar to prevent circumferential movement of the collar about the terminal
portion.
4. The motor of claim 3, wherein the terminal portion has a plurality of housings
accommodating the terminals and the snap-fit detents include at least one projection
25 formed on each housing.
5. The motor of claim 1, wherein the terminals of the commutator segments are
insulation displacing type terminals and the terminal portion has a plurality of
housings in which the terminals and lead wires of the rotor windings are received.
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6. The motor of claim 1, wherein the commutator is a cylindrical type
commutator.
7. The motor of claim 1, wherein the terminal portion and the support portion of
35 the base are two separate parts.